

PRECIOUS APPRAISAL



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PRECIOUS METALS REVIEW

Gold



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,961	0.04%	1,982	27/07/2023	1,943	27/07/2023
€/oz	1,777	0.76%	1,785	28/07/2023	1,762	24/07/2023

The ECB now looks unlikely to out-hike the Fed. Both central banks raised interest rates by 25 bp last week, though the markets were not convinced that the ECB intends to continue lifting its rate. Following the announcement by the ECB President, Christine Lagarde, the euro dropped significantly against the dollar as traders placed bets that the bank is nearing the end of its tightening cycle. The ECB has a firm medium-term inflation target rate of 2%, which is beginning to look within reach, and economic indicators in Europe are weak, particularly in manufacturing. These factors may lead to less aggressive monetary policy going forward if there is no surprise to the upside for inflation in H2'23. In the US, economic data remains strong, and at the end of last week traders were pricing in a 22% chance of another 25 bp hike at the next meeting in September.

Gold demand in China is recovering despite wider economic struggles. Gold consumption in China grew 16.4% year-on-year in H1'23 to 555 tonnes (source: China Gold Association). Gold bar and coin demand saw 30% growth versus H1'22 to 146.3 tonnes, while jewellery demand also saw a 14.8% expansion to 368.3 tonnes. The figures represent a recovery in demand from the lockdowns which hampered the start of 2022, that saw gold demand fall 23% year-on-year (source: World Gold Council).

The recovery exceeds a normalisation of demand, being 6% higher than pre-pandemic levels. Gold consumption in China could be more than 1,000 tonnes on an annualised basis. In addition to consumer demand, China's central bank increased its gold reserves by 103 tonnes in the first half. By the end of June, China's total gold reserves had reached 2,113 tonnes.

The dollar received double helping of support last Thursday, as the euro dropped 0.8% intraday and preliminary US GDP readings for Q2'23 came well above expectations at 2.4% quarter-on-quarter, exhibiting the resilience of the US economy. This pushed down gold and the other precious metals late in the week in dollar terms. Gold fell to an intraday low of \$1,943/oz, before recovering as markets shook off the surprise reading, finishing the week at \$1,961/oz.

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Silver



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	24.37	-1.11%	25.15	27/07/2023	24.04	27/07/2023
€/oz	22.07	-0.38%	22.63	27/07/2023	21.86	27/07/2023

Silver photovoltaic demand could receive a boost from US and EU solar spending. The US Department of Energy's latest capital tranche includes \$45 million for domestic manufacturing, and in the EU various private companies have received public funding for the development of multi-GW manufacturing projects. The solar sector has been the fastest-growing silver demand sector (13% CAGR since 2014) and is forecast to reach a record 161 moz this year (source: The Silver Institute), equal to ~14% of total demand. Investment in non-Chinese photovoltaic manufacturing is likely to simply result in re-routing of silver demand from the East to the West, while expected growth in solar capacity installations in the EU and US should lead to higher global net silver paste demand. Installed solar capacity grew by 18.5% and 19.8% in the US and Europe, respectively, in 2022 (source: Energy Institute).

Labour dispute in Mexico could hit silver supply in H2'23. Newmont's Peñasquito mine in Mexico is the second-largest silver mine in the world, yielding 29.7 moz of silver in 2022. The mine was closed in June owing to industrial action. Silver production fell by 13% to 13.7 moz, meanwhile gold production at the mine dropped by 52% to 123 koz. It is unclear if the mine will resume operation in H2'23, and production guidance has been withdrawn. If the mine remains closed for the rest of the year, ~20 moz of silver production may be lost, or ~2.4% of forecast global mine supply. This could be partially offset by the ramp-up of Fresnillo's Juanicipio mine which is expected to reach steady-state production in Q3'23 and produced 4.2 moz in H1'23.

The silver price plunged 3% last Thursday owing to the dollar rally. After a moderate recovery, it finished the week down 1.11% at \$24.37/oz.

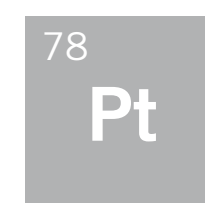
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Platinum



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	942	-2.25%	979	25/07/2023	931	28/07/2023
€/oz	853	-1.70%	886	25/07/2023	846	28/07/2023

Electric trucks reach 1.3% market share in the EU but platinum diesel autocatalysts are not running out of road. Diesel remained the dominant powertrain for heavy-duty vehicles in H1'23, with 95.6% of market share. The first half of the year also saw a significant 19.2% increase in heavy-duty truck sales, despite the weak economic backdrop in the EU. Europe's heavy-duty autocatalyst demand is forecast to reach 400 koz in 2023. Global heavy-duty platinum autocatalyst demand is forecast to grow by 7% this year to 720 koz as more combustion engine vehicles join the roads. Most of this growth comes from outside Europe (mainly China, +45 koz). The use case for electric heavy vehicles is relatively small, given that payload and range are the most important factors, and both are negatively impacted by battery pack weight and energy density. The most significant threat to heavy-duty autocatalyst demand is from fuel cell powertrains, but their widespread use is expected to be several years away and provides an alternative platinum demand stream from PGM-coated catalyst membranes.

The rand broke its trend of weakness last week, to the strongest level against the dollar since February. By the end of last week, a dollar was worth 17.5 rand, down from nearly 20 per dollar at the beginning of June. A stronger dollar-weaker rand scenario is negative for South African PGM miner operating margins, as costs are mainly in rands and revenue in dollars. This should also have lent support to the platinum price. However, like the rest of the precious metals, platinum saw a rapid decline on Thursday last week as the dollar gained relative strength from the decline of the euro. By Friday's close, the platinum price was at \$942/oz.

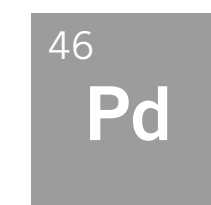
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Palladium



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,258	-2.37%	1,303	25/07/2023	1,225	27/07/2023
€/oz	1,140	-1.65%	1,178	25/07/2023	1,114	28/07/2023

Russian palladium supply was strong in H1'23 but is expected to drop later in the year. Nornickel's palladium production grew 5% year-on-year to 1.48 moz in the first half of 2023. This growth was attributed to successful processing of semi-finished stockpiles during the period. The company also maintained production guidance of 2.40-2.56 moz of palladium for the year, indicating that H2'23 production is expected to be 27-37% lower half-on-half at 925-1,080 koz. At the lower end of guidance, Russian palladium supply is expected to contract by 13% year-on-year. The company has postponed major smelter maintenance to late in the year, which should reduce refined palladium production in H2'23 and possibly into early next year. Global palladium supply is expected to fall by 3% to 6.3 moz in 2023 as a result of this maintenance and stagnant supply growth in South Africa from Eskom power outages and lower average PGM grades.

The palladium price fell by 2.37% last week, testing a technical support level that has formed around \$1,230/oz, but did not break down further.

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Rhodium, Ruthenium, Iridium



	RHODIUM	RUTHENIUM	IRIDIUM
Reporting Week	\$4,700/oz	\$475/oz	\$5,050/oz
Previous Week	\$4,600/oz	\$475/oz	\$5,050/oz

Does fuelling station regulation pave the way for greater European fuel cell mobility? The European Council has adopted legislation to require hydrogen refuelling stations in all urban nodes and every 200 km along the 24,500 km core Trans-European Transport Network by the end of the decade. Assuming currently installed stations are not included, this provides scope to double the number of stations in Europe, particularly in areas where they are few and far between at present. Germany currently has more than 50% of installed European fuelling stations (source: Clean Hydrogen Partnership), while France has 22 stations, mostly in Paris. Italy has a single station, and Spain has none that provide options for light-vehicle refuelling. Mandated infrastructure development could help to propel the uptake of both light- and heavy-duty fuel cell vehicles, which could add net demand for iridium and ruthenium in both producing and using green hydrogen for mobility.

The rhodium price ticked slightly higher last week to \$4,700/oz, while both iridium and ruthenium remained the same week-on-week.

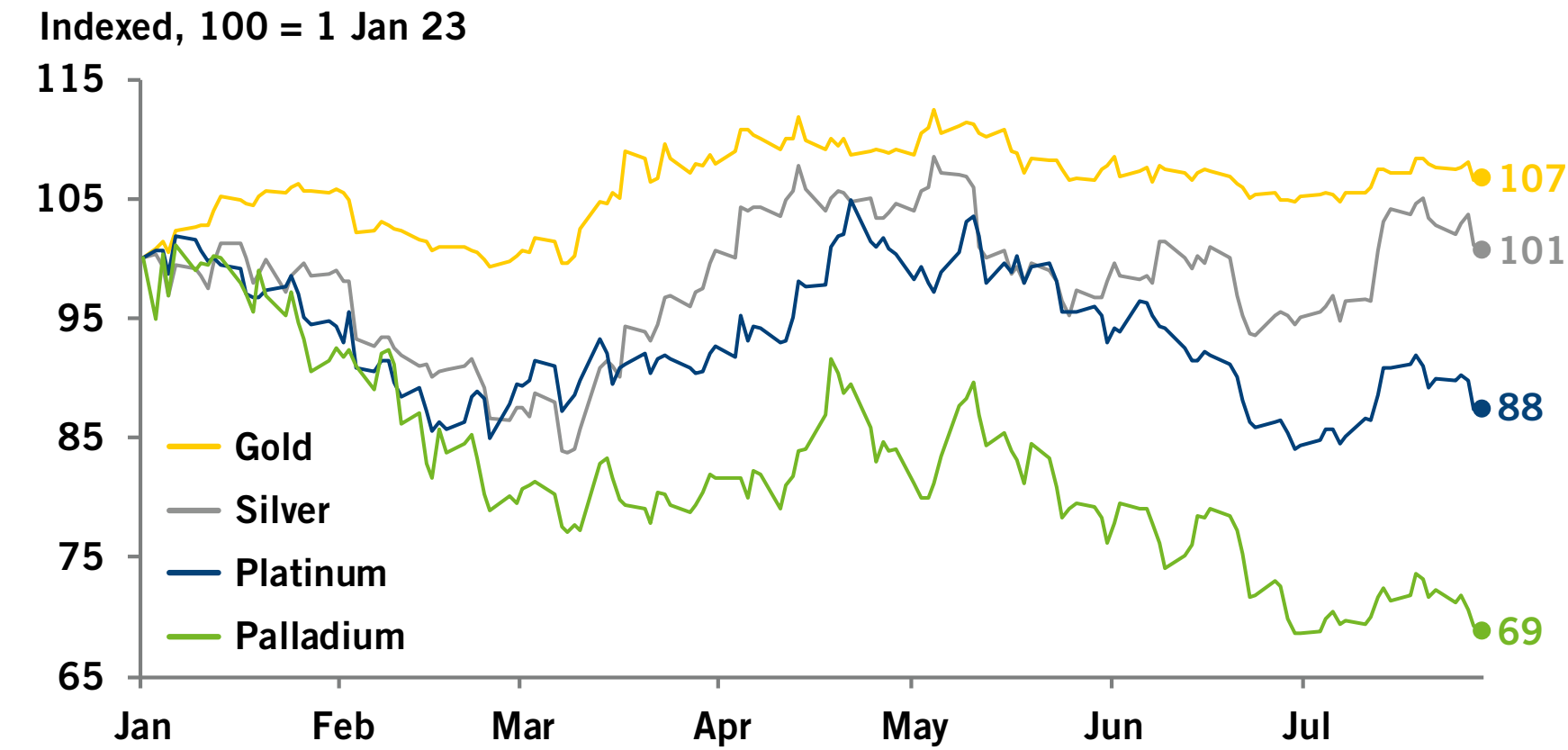
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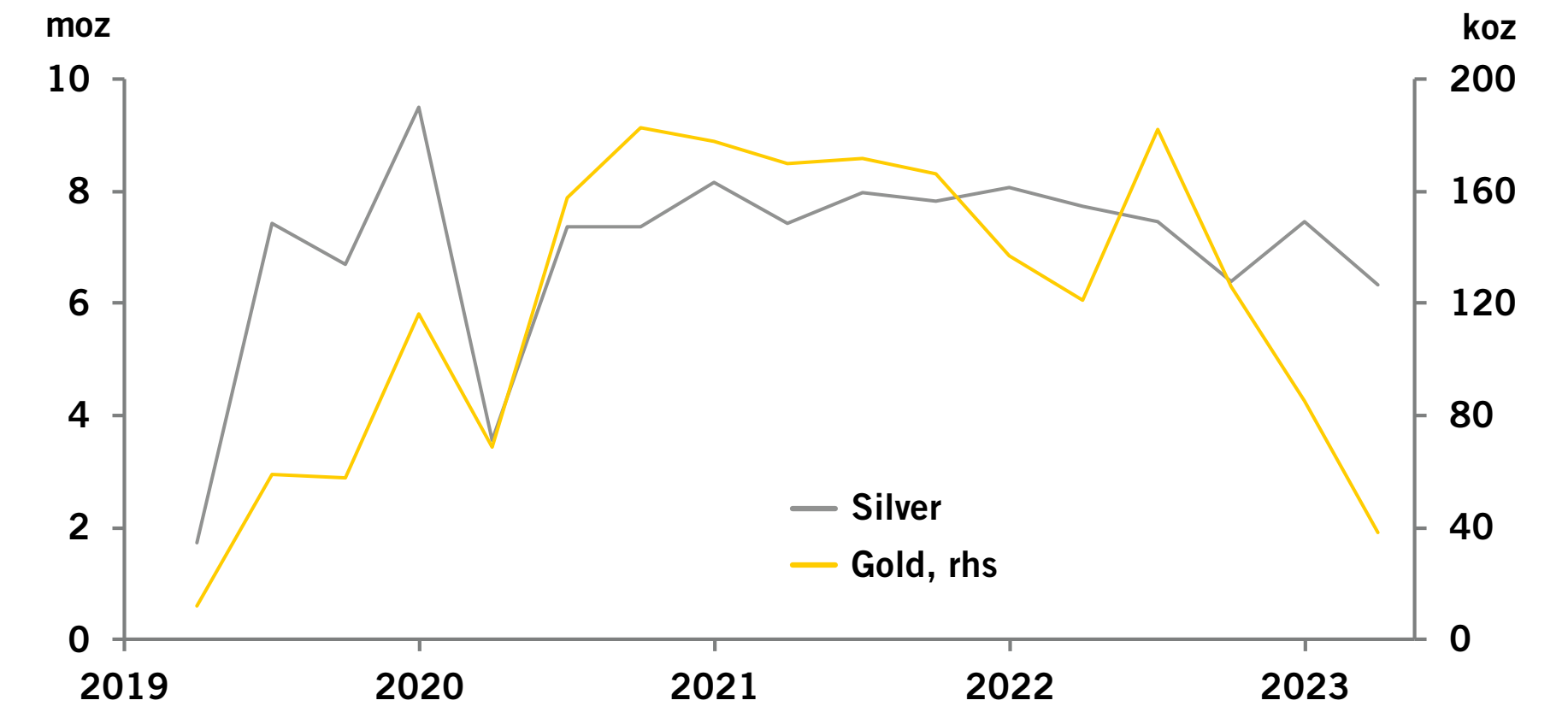
TRENDS AND INVESTMENTS

Precious metals prices, indexed



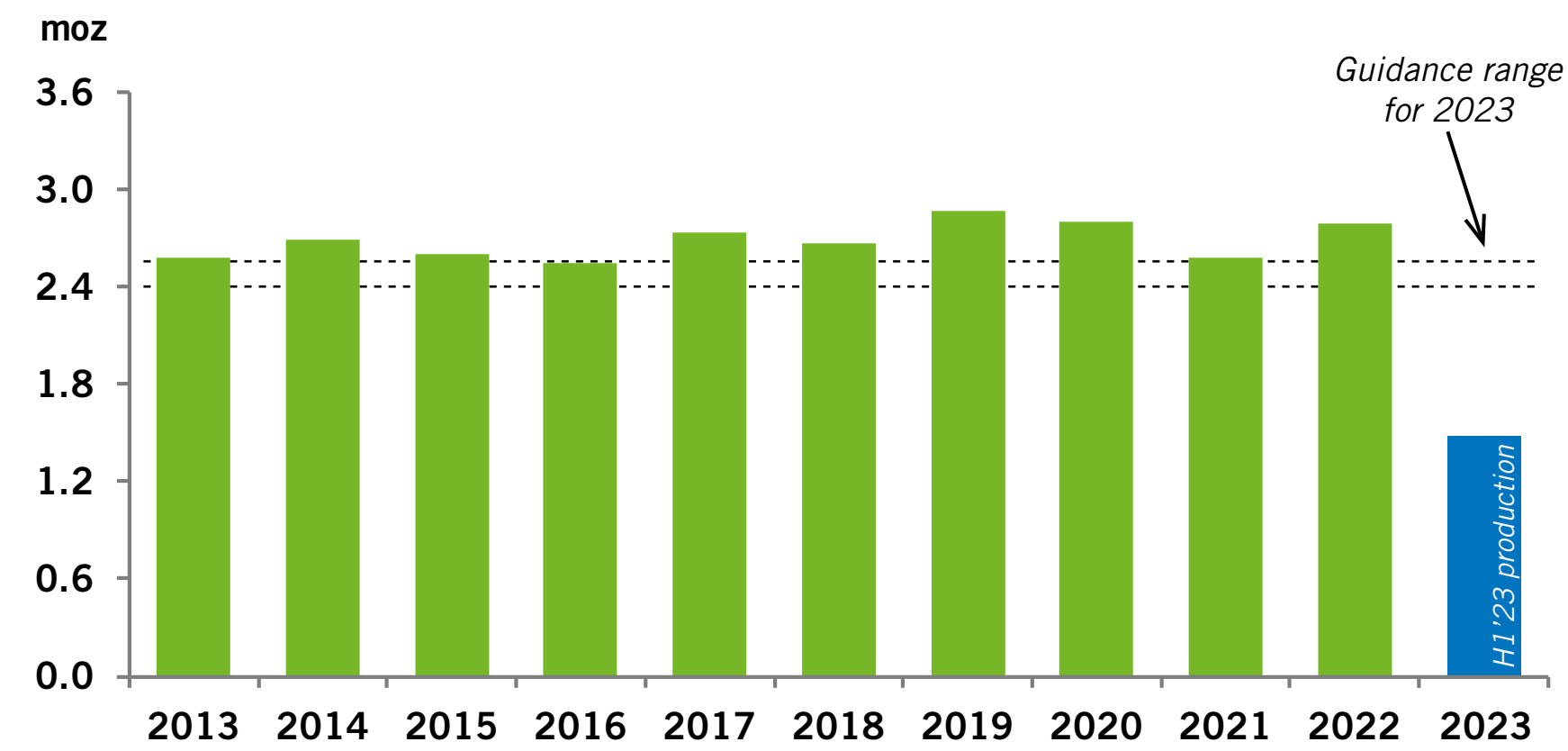
Source: SFA (Oxford), Bloomberg

Peñasquito quarterly gold and silver production



Source: SFA (Oxford), Newmont

Nornickel palladium production



Source: SFA (Oxford), Nornickel

EUR/USD exchange rate



Source: SFA (Oxford), Bloomberg

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